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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

VIA EMAIL - RETURN RECEIPT REQUESTED

Ryan Bose, Area Operations Manager Apache Corporation 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705 ryan.bose@apachecorp.com

Re: Clean Air Act Information Request for Apache Corporation Production Facilities

in Texas

Dear Mr. Bose:

The United States Environmental Protection Agency (EPA) hereby requires Apache Corporation (Apache) to provide certain information to determine the Clean Air Act (CAA or the Act) compliance status of its production facilities in Texas. From September 10, 2019 through October 3, 2019, the EPA contracted helicopter flyovers for a portion of the Permian Basin to assess emission sources using optical gas imaging (OGI), and on September 11, 2019, the EPA captured OGI images of unauthorized emissions at Apache facilities in Texas. The EPA is requesting information about Apache's Texas facilities recorded in the September 2019 OGI videos, as well as additional facilities for the purpose of determining if the additional facilities have compliance issues similar to those identified during the flyovers.

Pursuant to section 114(a) of the CAA, 42 U.S.C. § 7414(a), the Administrator of the EPA is authorized to require any person who owns or operates an emissions source to establish and maintain records, make reports, sample emissions (in accordance with the procedures and methods that the Administrator shall prescribe) and provide such other information as he may reasonably require for the purpose of, among other things, determining whether any person is in violation of the CAA. This authority has been delegated to the undersigned official. Apache is hereby required, pursuant to section 114(a) of the CAA, to provide responses to this information request, within 45 calendar days from receipt of this information request. Instructions and definitions are provided in Enclosure 1 and the information requested is specified in Enclosure 2.

In addition, Apache is required to attach a properly executed Statement of Certification (see Enclosure 3) with its responses to this information request. The statement must be signed and dated. Finally, Apache is under an obligation to preserve all documents requested in this letter until it receives further instructions from the EPA.

Failure to provide the required information is a violation of the Act and may result in one or more of the following actions: 1) issuance of an administrative penalty order pursuant to section 113(d) of the Act, 42 U.S.C. § 7413(d); 2) issuance of an order requiring compliance with this information request pursuant to section 113(a) of the Act, 42 U.S.C. § 7413(a); 3) initiation of a civil action pursuant to section 113(b) of the Act, 42 U.S.C. § 7413(b); and 4) initiation of any other action authorized under the Act. In addition, knowingly providing false information in response to this information request may be actionable under section 113(c) of the Act, 42 U.S.C. § 7413(c), and 18 U.S.C. §§ 1001 and 1341. The information Apache provides may be used by the EPA in administrative, civil, and criminal proceedings.

Under section 114(c) of the Act, 42 U.S.C. § 7414(c), and pursuant to regulations at 40 C.F.R. Part 2, including 40 C.F.R. § 2.301, Apache may claim as confidential any information provided to the EPA that involves trade secrets and is regarded as confidential business information. Apache may request that the EPA treat such information as confidential business information. Any claim for confidentiality must conform to the requirements of 40 C.F.R. § 2.203(b). Note that emission data cannot be claimed as confidential under section 114(c). For detailed instructions, please see Enclosure 4. Information provided to the EPA will be treated as confidential business information to the degree determined to be appropriate according to the regulations. If Apache fails to claim confidentiality with its response to this information request, the EPA will construe your failure as a waiver of that claim, and the information may be made available to the public without further notice to Apache.

Please submit the requested information electronically. You may do so via email to Providence Spina at spina.providence@epa.gov. Please note that the EPA email server will allow attachments up to 20 MB. Alternatively, Apache may want to provide documents in response to this information request by way of a secure file sharing site. Please let us know how Apache wants to proceed. The EPA acknowledges that the COVID-19 pandemic may be impacting Apache's business. If that is the case, please contact Ms. Spina within 10 days of receipt of this information request with the specific circumstances to determine if an extension for responding to this information request is warranted.

If you have any questions regarding this information request, please contact Providence Spina at 202-564-2722 (spina.providence@epa.gov).

Sincerely,

Gregory Fried, Chief Stationary Source Enforcement Branch Air Enforcement Division Office of Civil Enforcement cc: Michael Miller, Air Program Liaison, Office of Compliance & Enforcement Program Support and Environmental Assessment Division, Texas Commission on Environmental Quality

Steve Thompson, Chief, Air Enforcement Branch, EPA Region 6 Alexandrea Roland, Office of Regional Counsel, EPA Region 6 Providence Spina, Air Enforcement Division, EPA OECA Dalva Moellenberg, Gallagher & Kennedy, Counsel for Apache Corporation William Underwood, Gallagher & Kennedy, Counsel for Apache Corporation

Enclosures: 1) Instructions and Definitions

- 2) Information Request
- 3) Statement of Certification
- 4) Confidential Business Information

A. <u>Instructions</u>

- 1. Provide a separate narrative response to each request and subpart set forth in the Information Request. Provide all Documents supporting Your responses to this Information Request, such as performance test reports, inspection records, memoranda, facility records, permits, etc. If Apache has no responsive Information or Documents pertaining to a particular request, submit an affirmative statement and explanation.
- 2. Precede each answer with the number of the request to which it corresponds and at the end of each answer identify the Person(s) (including name, title, and a description of job duties) who provided Information that was used or considered in responding to that request, as well as each Person (including name, title, and a description of job duties) who was consulted in the preparation of that response.
- 3. Indicate on each Document produced in response to this Information Request, or in some other reasonable manner, the number of the request to which it corresponds. If a Document is responsive to more than one request, this must be so indicated and only one copy of the Document needs to be provided.
- 4. Where requested, please submit electronic data or list information in Microsoft Excel or similar format. You may also provide all Documents responsive to this Information Request in electronic Portable Document Format (PDF). All submitted Documents must be accurate and legible.
- 5. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner and the basis for the number provided (e.g., estimated, measured or engineering judgment).
- 6. Where Documents or Information necessary for a response are neither in Your possession nor available to You, indicate in Your response why such Documents or Information are not available or in Your possession and identify any source that either possesses or is likely to possess such Documents or Information.

B. Definitions

All terms used in this Information Request will have their ordinary meaning unless such terms are defined in the Clean Air Act, or in 40 C.F.R. §§ 60.2 or 60.5430a, in which case the definitions in the CAA and the implementing regulations shall apply.

Apache means Apache Corporation and includes any parent corporation, subsidiaries, whether wholly or partially owned, or joint-ventures, or other business affiliations.

Document and the plural form thereof means all written, recorded or graphic matters, however produced or reproduced, of every kind and description, pertaining in any way to the subject matter of this action. The terms "Document" shall include, but is not limited to: any receipts;

invoices; shipping records; purchase orders; purchase records; books; pamphlets; periodicals; memoranda (including those of telephone or oral conversations); contracts; correspondence; agreements; applications; financial records; security instruments; disbursements; checks; bank statements; time records; accounting or financial records; notes; diaries; logs; facsimiles (faxes); telegrams or cables prepared, drafted, received or sent; electronic mail (emails), whether drafted, received or sent; tapes; transcripts; recordings; minutes and notes of meetings; directives; work papers; charts; drawings; prints; flow sheets; photographs; infrared camera recordings; film; computer printouts; x-ray photographs; advertisements; catalogs; data; sampling reports, plans, protocols, reports, analyses; or any handwritten, recorded, transcribed punched, taped, filmed or graphic matter, however produced or reproduced, in Apache's possession, custody or control or to which Apache has or has had access.

EPA means the United States Environmental Protection Agency.

Flyover Facilities shall refer to the facilities included in the table below:

Facility Name	TCEQ Regulated	Permit Number	Physical Location	
	Entity No.			
Bull Run CTB	RN109817049	147254	31.661743, -103.879092	
Lee CTB	RN109817031	147253	31.660685, -103.872956	
Dixieland Lee	RN109817023	147252	31.661765, -103.865762	
Compressor Station				
Grant Compressor	RN110115185	150102	31.668856, -103.851049	
Station				

Information Request means this letter and its enclosures.

Information means any written, recorded, or graphic matter of any nature whatsoever, regardless of how recorded, and whether original or copy, including but not limited to, the following: memoranda, reports, books, manuals, instructions, working papers, records, notes, letters, notices, confirmations, receipts, appraisals, pamphlets, magazines, newspapers, prospectuses, interoffice and intraoffice communications, electronic mail (email), calendars, contracts, cables, notations of any type of conversation, telephone call, meeting, or other communication, bulletins, printed matter, computer printouts, invoices, transcripts, diaries, analyses, returns, summaries, minutes, bills, accounts, estimates, projections, comparisons, messages, correspondence, press releases, circulars, financial statements, reviews, opinions, offers, studies and investigations, questionnaires and surveys, presentations, spreadsheets, and work sheets. The term "Information" includes all drafts, preliminary versions, alterations, modifications, revisions, changes, and amendments to the foregoing, as well as any attachments or appendances thereto. The term "Information" also means any graphic or oral records or representations of any kind (including, without limitation, photographs, charts, graphs, voicemails, microfiche, microfilm, videotapes, recordings, and motion pictures), electronic and mechanical records or representations of any kind (including, without limitation, tapes, cassettes, disks, computer server files, computer hard drive files, CDs, DVDs, back-up tape, memory sticks, recordings, and removable computer media such as thumb drives, flash drives, memory cards, and external hard drives), and other written, printed, typed, or other graphic or recorded matter of any kind or

nature, however produced or reproduced, and whether preserved in writing, film, tape, electronic format, disk, videotape or otherwise. Information bearing any notation not part of the original text is considered to be separate Information. A draft or non-identical copy is separate Information within the meaning of this term.

Person or its plural or any synonym thereof, is intended to and shall embrace and include any individual, partnership, corporation, company, association, government agency (whether federal, state, local or any agency of the government of a foreign country) or any other entity.

TCEQ means the Texas Commission on Environmental Quality.

You and/or Your means Apache, and all its agents, servants, employees, representatives, investigators, accountants, auditors, attorneys, experts, consultants, contractors and others who are in possession, custody or control (actual or constructive) of relevant Information that is otherwise available to You, or may have obtained Information for or on behalf of, Apache.

Information Request

Using the instructions and definitions set forth in Enclosure 1, provide the following Information within the time period specified in the cover letter of this Information Request.

- 1. For each well that Apache owns or operates that was drilled in Texas after August 23, 2011, and on or before receipt of this Information Request, provide the following Information in Microsoft Excel spreadsheet format:
 - a) US well number;
 - b) Dates of completion and initial start of production;
 - c) Daily oil production (in barrels) for the period beginning October 1, 2016, until receipt of this Information Request;
 - d) The associated storage vessel battery name and names for each identified well;
 - e) The dates of construction, dates of reconstruction, and dates of modification of each storage vessel, within each identified storage vessel battery;
 - f) Records of the monthly total throughput of oil for each storage vessel and monthly average separator pressure recorded for the period beginning October 1, 2016, until receipt of this Information Request;
 - g) The TCEQ issued standard permit registration number, permit by rule registration number, air permit number, and regulated entity number, if any, for each identified storage vessel battery; and
 - h) For each identified storage vessel battery for which a permit by rule registration number is provided, indicate whether the registration application forms submitted to TCEQ certified the maximum emission rates from the storage vessels using TCEQ's Form PI-7.

Separately, for each of the Flyover Facilities:

- 2. For each of the Flyover Facilities, identify all actions taken to correct unauthorized hydrocarbon emissions identified in the optical gas imaging flyover videos recorded by EPA's contractor on September 11, 2019, and that EPA provided to Apache on November 26, 2019.
- 3. For each of the Flyover Facilities, provide all reports submitted to TCEQ in satisfaction of requirements under 40 C.F.R. Part 60, Subpart OOOOa.
- 4. For each well affected facility associated with the Flyover Facilities, provide completion operation records required by 40 C.F.R. § 60.5420a(c)(1) for well completions that occurred after September 18, 2015, until receipt of this Information Request.
- 5. For each storage vessel of oil, condensate, produced water, and slop/sump oil, and each storage vessel that contains a volatile organic compound (VOC) or a film of VOC on the surface of water, provide the following storage vessel records:
 - a) The identification and location of each storage vessel; and
 - b) Records of each VOC emissions determination for each storage vessel made under 40 C.F.R. § 60.5365a(e), until receipt of this Information Request, including

identification of the model or calculation methodology used to calculate the VOC emission rate.

- 6. For each collection of fugitive emissions components, as defined in 40 C.F.R. § 60.5430a, at a well site or compressor station, where well site or compressor station construction, modification, or reconstruction commenced after September 18, 2015, until receipt of this Information Request (including existing well sites where a new well was drilled; existing well sites where an existing well was hydraulically fractured, existing wells sites where an existing well was hydraulically refractured, compressor stations where an additional compressor was installed, and compressor stations where one or more compressors was replaced by one or more compressors of greater total horsepower than the compressor(s) being replaced), provide:
 - a) The dates of construction, dates of reconstruction and dates of modification for the well site or compressor station; and
 - b) All required records created after October 1, 2016, and on or before receipt of this Information Request identified in:
 - i. 40 C.F.R. § 60.5420a(c)(15)(i) through (iii); and
 - ii. Texas Air Quality Standard Permit for Oil and Gas Handling and Production Facilities (Non-rule), paragraph (j)(2), for demonstration of compliance with the requirements listed in Table 8 of paragraph (m), Voluntary LDAR Program.
- 7. For each VRU and control device used to reduce VOC emissions from storage vessels, or to route vapors to process after October 1, 2016, and on or before receipt of this Information Request, provide:
 - a) The manufacturer, model number, and manufacturer's operating instructions, procedures, and maintenance schedule;
 - b) Any run time records that document the dates and times after October 1, 2016, and on or before receipt of this Information Request, that the VRU or control device was in operation;
 - c) Reason why out of service;
 - d) Any pressure monitoring records of the vent stream at the inlet to the VRU or control device created after October 1, 2016, and on or before receipt of this Information Request; and
 - e) A description of the operation of the blowers used to control air flow into the control device. For example, are the blowers variable speed or are they high/low speed? Are the blowers manually operated or do they start/stop automatically? What are the operating parameters that would cause Apache to not operate the blower with the control device? Also, provide any records of blower maintenance or downtime.
- 8. For each storage vessel with a closed vent system that routes vapors to a control device or process, provide any closed vent system or storage vessel pressure monitoring records created after October 1, 2016, and on or before receipt of this Information Request.
- 9. For each combustion control device used to reduce VOC emissions from storage vessels provide any control device temperature or pilot flame monitoring records created after October 1, 2016, and on or before receipt of this Information Request.

- 10. Provide all Documents and recorded videos in Apache's possession, created after October 1, 2016, and on or before receipt of this Information Request, pertaining to Apache's response to VOC emissions from storage vessels, closed vent system pressure relief devices and unlit flares, including VOC emissions detected by:
 - a) EPA or TCEQ during inspections or flyovers; and
 - b) Apache by auditory, visual, olfactory monitoring, optical gas imaging (OGI), or other fugitive emissions monitoring.
- 11. For each pig launcher and pig receiver, provide:
 - a) The Flyover Facility where it is located;
 - b) Indicate if it is pig launcher or pig receiver;
 - c) The volume of the pig launcher or receiver;
 - d) The density and mass percentage of VOC of pipeline fluids at normal pipeline operating conditions, include fluid sampling report(s) and analytical result(s) used to determine the fluid characteristics and identify the sampling location(s), sample pressure and temperature; and
 - e) For each calendar day after October 1, 2016, and on or before receipt of this Information Request, the number of pig receipts and the number of pig launches per day.
- 12. For each pig launcher and pig receiver, provide a description of how pipeline fluids from the pig launcher and receiver are managed, describing enclosures, piping, vents, emission points, and drains on the pig launcher and receiver and where gases, vapors, and liquids, including any blowdown fluids from the pig launcher or receiver, are routed. For each pig receiver indicate in Your description the location and orientation of any outlet piping or drains where liquids are routed from the pig barrel.
- 13. Pursuant to 40 C.F.R. § 60.7(b), provide records of each occurrence and duration of startups, shutdowns, and malfunctions in the operation of each storage vessel battery and vapor recovery towers (VRTs) including startups, shutdowns, and malfunctions of the vapor recovery units, vapor combustion units, and flares used to control or capture emissions from the storage vessels or VRTs after October 1, 2016, and on or before receipt of this Information Request. For each identified startup, shutdown, and malfunction, provide the following Information:
 - a) Facility name;
 - b) The identification name/number for each storage vessel, vapor recovery unit, vapor combustion unit, and flare, as applicable;
 - c) The date/time and duration; and
 - d) For each identified malfunction provide a description and associated Information that demonstrates the malfunction event was not caused by poor maintenance, and was sudden, infrequent, and not a reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner.
- 14. For each oil, condensate, and produced water storage vessel, provide the following storage vessel records:
 - a) Records of the monthly total throughput of oil after October 1, 2016, until receipt of this Information Request;

- b) Records of deviations that occurred after October 1, 2016, until receipt of this Information Request, in cases where the storage vessel was not operated in compliance with the requirements specified in 40 C.F.R. §§ 60.5395a, 60.5411a, 60.5412a, and 60.5413a, as applicable; and
- c) Records of each storage vessel, closed vent system, and cover inspection and associated repairs for inspections conducted after October 1, 2016, until receipt of this Information Request, required under 40 C.F.R. § 60.5416a(c)(1), (2), (6), or (7).
- 15. For each storage vessel control device, records of the inspections conducted after October 1, 2016, until receipt of this Information Request, including any corrective actions taken, as specified in 40 C.F.R. § 60.5417a(h)(3).
- 16. For each flare used as a storage vessel control device, provide results of monitoring conducted after October 1, 2016, until receipt of this Information Request, using EPA Method 22 of appendix A-7 of 40 C.F.R., part 60, section 11, which include: Company; location; company representative (name of the Person performing the observation); sky conditions; process unit (type of control device); clock start time; observation period duration (in minutes and seconds); accumulated emission time (in minutes and seconds); and clock end time.
- 17. For each flare used as a storage vessel control device, provide records of all times and durations after October 1, 2016, until receipt of this Information Request, where either the flare's pilot flame was not monitored or where monitoring indicated the pilot flame was not present, and provide a description of the reason for the lack of monitoring or pilot flame.
- 18. For each closed vent system routing to a control device or process, for any storage vessels constructed, modified, or reconstructed after September 18, 2015, until receipt of this Information Request, provide all Documents pertaining to assessments of the closed vent system design and capacity to ensure that all emissions from the storage vessels are routed to a control device, or that the control device is of sufficient design and capacity to accommodate all emissions from the storage vessels, including a copy of each assessment and a copy of each certification, if certified pursuant to 40 C.F.R. § 60.5411a(d).
- 19. For each closed vent system routing to a control device or process, that has one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes away from the control device or process to the atmosphere, if the noted criteria are satisfied, provide the following information:
 - a) For each bypass device that has a flow indicator or alarm or other signal that provides notification via a remote alarm when the bypass device is open, identify the bypass device and the Flyover Facility, indicate if records of each time the alarm was activated are maintained, and provide records of each time the alarm was activated from after October 1, 2016, until receipt of this Information Request;
 - b) For each bypass device that has a bypass device valve installed at the inlet to the bypass device, secured in the non-diverting position using a car seal or a lock and key type configuration, identify the bypass device and Flyover Facility, indicate if records of monthly visual inspections of the seal or closure mechanism are maintained, and provide

- the monthly visual inspection records of the seal or closure mechanism from after October 1, 2016, until receipt of this Information Request;
- c) For each bypass device with neither a flow indicator or alarm or other signal that provides notification via a remote alarm when the bypass device is open, nor a bypass device valve installed at the inlet to the bypass device, secured in the non-diverting position using a car seal or a lock and key type configuration, identify the bypass device and Flyover Facility.

Statement of Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations pursuant to section 113(c)(2) of the Clean Air Act, and 18 U.S.C. §§ 1001 and 1341.

(Signature)		
(D: (1))		
(Printed Name)		
(Title)		
(Date)	 	

Confidential Business Information (CBI)

An entity may assert a business confidentiality claim covering all or part of the information provided in response to this Information Request for any business information entitled to confidential treatment under Section 114(c) of the CAA, 42 U.S.C. § 7414(c), and 40 C.F.R. Part 2, subpart B. Under Section 114(c) of the CAA, entities are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means "the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information." 40 C.F.R. § 2.201(e).

Information covered by a claim of business confidentiality will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the CAA and 40 C.F.R. Part 2, subpart B. If no such business confidentiality claim accompanies the response to this Information Request when it is received by the EPA, then such information may be made available to the public without further notice. 40 C.F.R. § 2.203(c).

Pursuant to 40 C.F.R. § 2.301(h), the EPA possesses the authority to disclose to any authorized representative of the United States information which might otherwise be entitled to confidential treatment. To assist in its review and analysis, the EPA may disclose information provided in response to this and other information requests to an EPA contractor, the Eastern Research Group, under contract number EP-W-15-006.

To assert a business confidentiality claim, an entity must place on (or attach to) all information subject to the claim either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential" at the time it provides its response to this Information Request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified and may be provided separately to facilitate identification and handling by the EPA. An entity should indicate whether confidential treatment is only required until a certain date or until the occurrence of a certain event.

The criteria the EPA will use in determining whether material claimed as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208(a)-(d) and 2.301. Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).